

PMP30189 REV B Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
C1, C2, C3, C4, C5	5	10uF	C3225X7R1H106M250AC	TDK	CAP, CERM, 10 μ F, 50 V, +/- 20%, X7R, 1210	1210
C6	1	1uF	GRM31MR71H105KA88L	MuRata	CAP, CERM, 1 μ F, 50 V, +/- 10%, X7R, 1206	1206
C7	1	4.7uF	GRM21BR71C475KA73L	MuRata	CAP, CERM, 4.7 μ F, 16 V, +/- 10%, X7R, 0805	0805
C8	1	100pF	06035A101FAT2A	AVX	CAP, CERM, 100pF, 50V, +/-1%, C0G/NP0, 0603	0603
C9	1	0.47uF	GRM188R71E474KA12D	MuRata	CAP, CERM, 0.47uF, 25V, +/-10%, X7R, 0603	0603
C10	1	27pF	C0603C270J5GACTU	Kemet	CAP, CERM, 27 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C11	1	6800pF	C0603C682J5RACTU	Kemet	CAP, CERM, 6800 pF, 50 V, +/- 5%, X7R, 0603	0603
C12, C13	2	470uF	50ZLH470M12.5X20	Rubycon	CAP, AL, 470 μ F, 50 V, +/- 20%, 0.027 ohm, TH	12.5x20mm
C14, C15, C21	3	1uF	08055C105KAT2A	AVX	CAP, CERM, 1 μ F, 50 V, +/- 10%, X7R, 0805	0805
C16	1	0.1uF	08055C104JAT2A	AVX	CAP, CERM, 0.1uF, 50V, +/-5%, X7R, 0805	0805
C17	1	820pF	GRM188R72A821KA01D	MuRata	CAP, CERM, 820 pF, 100 V, +/- 10%, X7R, 0603	0603
C18	1	820pF	GRM1885C1H821JA01D	MuRata	CAP, CERM, 820 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C19, C23	2	1uF	C1608X7R1C105K080AC	TDK	CAP, CERM, 1 μ F, 16 V, +/- 10%, X7R, 0603	0603
C20	1	0.39uF	GRM188R71C394KA88D	MuRata	CAP, CERM, 0.39 μ F, 16 V, +/- 10%, X7R, 0603	0603
C22	1	100pF	GRM1885C1H101JA01D	MuRata	CAP, CERM, 100pF, 50V, +/-5%, C0G/NP0, 0603	0603
C24, C25, C26	3	0.01uF	06031C103JAT2A	AVX	CAP, CERM, 0.01 μ F, 100 V, +/- 5%, X7R, 0603	0603
D1	1	DFLS1100-7	DFLS1100-7	Diodes Inc.	Diode, Schottky, 100V, 1A, PowerDI123	PowerDI123
D2	1	PDS760Q-13	PDS760Q-13	Diodes Inc.	Diode, Schottky, 60 V, 7 A, PowerDI5	PowerDI5
D3	1	7.5V	MM3Z7V5B	Fairchild Semiconductor	Diode, Zener, 7.5 V, 200 mW, SOD-323F	SOD-323F
D4, D5, D6	3	BAS21	BAS21-TP	Micro Commercial Components	Diode, P-N, 200V, 200A, SOT-23	SOT-23
GND1, TP2	2		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
H1	1		573300D00010G	Aavid	Heatsink, DDPak/TO-263, SMT	Heatsink, DDPak
J1, J2	2		1732720	Phoenix Contact	Terminal Block, 2x1, 7.62mm, TH	15.21x18x12.8mm
J3, J4	2		800-10-002-10-001000	Mill-Max	Header, 100mil, 2x1, TH	Header, 2x1, 100mil, TH
J5, J8	2		39357-0002	Molex	Terminal Block, 3.5 mm, 2x1, Tin, TH	Terminal Block, 3.5 mm, 2x1, TH
J6	1		39357-0003	Molex	Terminal Block, 3.5 mm, 3x1, Tin, TH	Terminal Block, 3.5 mm, 3x1, TH
J7	1		800-10-003-10-001000	Mill-Max	Header, 100mil, 3x1, TH	Header, 3x1, 100mil, TH
L1	1	7uH	7443630700	Würth Elektronik	Inductor, Shielded Drum Core, Mn-Zn, 7 μ H, 21 A, 0.005608 ohm, SMD	21.8x14.5x21.5mm
Q1, Q2, Q3	3	CSD18533Q5A	CSD18533Q5A	Texas Instruments	MOSFET, N-CH, 60 V, 100 A, DQJ0008A (VSONP-8)	DQJ0008A
Q4	1	MMBT3904	MMBT3904LT1G	ON Semiconductor	Transistor, NPN, 40 V, 0.2 A, SOT-23	SOT-23
Q5, Q6	2	2N7002-7-F	2N7002-7-F	Diodes Inc.	MOSFET, N-CH, 60 V, 0.17 A, SOT-23	SOT-23
R1	1	3.24	CRCW06033R24FKEA	Vishay-Dale	RES, 3.24 ohm, 1%, 0.1W, 0603	0603
R2, R23, R24, R29	4	100k	CRCW0603100KFKEA	Vishay-Dale	RES, 100 k, 1%, 0.1 W, 0603	0603
R3	1	4.87k	RC0603FR-074K87L	Yageo America	RES, 4.87 k, 1%, 0.1 W, 0603	0603
R4, R8	2	2.21	RC0805FR-072R21L	Yageo America	RES, 2.21, 1%, 0.125 W, 0805	0805
R5	1	294k	RC0603FR-07294KL	Yageo America	RES, 294 k, 1%, 0.1 W, 0603	0603
R6	1	158k	RC0603FR-07158KL	Yageo America	RES, 158 k, 1%, 0.1 W, 0603	0603
R7	1	1.21	CRCW08051R21FKEA	Vishay-Dale	RES, 1.21 ohm, 1%, 0.125W, 0805	0805
R9	1	1.65k	RC0603FR-071K65L	Yageo America	RES, 1.65 k, 1%, 0.1 W, 0603	0603
R10	1	49.9k	RC0603FR-0749K9L	Yageo America	RES, 49.9 k, 1%, 0.1 W, 0603	0603
R11	1	33.2k	RC0603FR-0733K2L	Yageo America	RES, 33.2 k, 1%, 0.1 W, 0603	0603
R12, R13, R27	3	47.5k	RC0603FR-0747K5L	Yageo America	RES, 47.5 k, 1%, 0.1 W, 0603	0603
R14, R18, R21	3	100	RC0603FR-07100RL	Yageo America	RES, 100, 1%, 0.1 W, 0603	0603

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R15	1	49.9	RC0603FR-0749R9L	Yageo America	RES, 49.9, 1%, 0.1 W, 0603	0603
R16, R17	2	0.009	PRL1632-R009-F-T1	Susumu Co Ltd	RES, 0.009, 1%, 1 W, 0612	0612
R19	1	6.81k	RC0603FR-076K81L	Yageo America	RES, 6.81 k, 1%, 0.1 W, 0603	0603
R20, R22, R25	3	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, 0603	0603
R26	1	10.5k	RC0603FR-0710K5L	Yageo America	RES, 10.5 k, 1%, 0.1 W, 0603	0603
R28	1	1.58k	RC0603FR-071K58L	Yageo America	RES, 1.58 k, 1%, 0.1 W, 0603	0603
SW1	1		5002	Keystone	Test Point, Miniature, White, TH	White Miniature Testpoint
TP1, TP3, TP4	3		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
U1	1	LM5117QPMH/NOPB	LM5117QPMH/NOPB	Texas Instruments	Wide Input Range Synchronous Buck Controller with Analog Current Monitor, PWP0020A (TSSOP-20)	PWP0020A
U2	1	TL431AIDBZR	TL431AIDBZR	Texas Instruments	Adjustable Precision Shunt Regulator, 34 ppm / degC, 100 mA, -40 to 85 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	DBZ0003A
U3	1	LM2903VQDR	LM2903VQDR	Texas Instruments	Dual Comparator, D0008A	D0008A

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